

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/719,683	11/24/2003	Bob Streefkerk	081468-0306882	1907	
909	7590 01/25/2006		EXAMI	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN, LLP			RUTLEDGE, DELLA J		
P.O. BOX 10 MCLEAN, V			ART UNIT PAPER NUMBER		
			2851		
			DATE MAILED: 01/25/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/719,683	STREEFKERK ET AL.			
		Examiner	Art Unit			
		D. Rutledge	2851			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	correspondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAY IN THE MAILING THE MAILI	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on <u>14 November 2005</u> .					
•	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)[	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposit	ion of Claims		·			
4)⊠	Claim(s) <u>1-53</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)□	Claim(s) <u>20-37 and 42-45</u> is/are allowed.					
6)⊠	Claim(s) <u>1-4,8-11,14,18,19,46-50 and 53</u> is/are rejected.					
·	☑ Claim(s) <u>5-7,12,13,15-17,40,41,51 and 52</u> is/are objected to.					
8)[	Claim(s) are subject to restriction and/or	r election requirement.				
Applicat	ion Papers					
9)[	The specification is objected to by the Examine	r.				
10)🔀	The drawing(s) filed on 1/24/04 is/are: a) acce	epted or b) objected to by the I	Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)[	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority (	under 35 U.S.C. § 119					
	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents		)-(d) or (f).			
	<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>					
	3. Copies of the certified copies of the prior					
	application from the International Bureau	· •				
* 5	See the attached detailed Office action for a list		ed.			
		,				
Attachmen	• •					
	ce of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
3) 🔯 Infon	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date 02/04.		ratent Application (PTO-152)			

Application/Control Number: 10/719,683

Art Unit: 2851

#### **DETAILED ACTION**

#### **Drawings**

1. The drawings 24 November 2004 are acceptable for examination.

#### Claim Rejections - 35 USC § 102

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
  - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 4, 8, 9, 11,14, 38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Holder et al. (US Pat. No. 5,991,101).

The reference has a joint technique for a microlithographic apparatus (see column 3, lines 4 and 5). The technique involves using a metal solder for joining an optical element, for example a lens 1, to a support or mount 3. Claims 1, 38

Claims 4, 14, 39 – using a metal inorganic layer 2

Claim 8 heat - is applied to the inorganic layer 2

Claims 9, 11 – heat up to 600 or 9000 ° C may be used

Claims 19 – the optical element is a lens

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Application/Control Number: 10/719,683 Page 3

Art Unit: 2851

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 2, 3, 18, 19, 46 50 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holderer et al. (US Pat. No. 5,991,101).

The reference does not disclose whether the joint technique is used in an immersion exposure environment. Since the joint technique involves using a metal solder the joint would prevent leaking of the immersion liquid and would therefore be suitable for such an environment. Claims 2, 3, 18, 19, 46, 53

Claims 47, 50 – the inorganic layer is metal, is a metal solder

Claims 47, 48 – heat is used to make the joint, clean surfaces are joined

### Allowable Subject Matter

7. Claims 5 - 7, 12, 13, 15 – 17, 40, 41, 51 and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

Application/Control Number: 10/719,683

Art Unit: 2851

independent form including all of the limitations of the base claim and any intervening

claims.

8. Claims 20 – 37 and 40 – 45 are allowed.

9. The following is a statement of reasons for the indication of allowable subject

matter: The reference does not disclose using a direct bond.

Response Data

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to D. Rutledge whose telephone number is (571) 272-2127. The examiner can normally be

reached on Mon - Thurs, 6:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy

Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free).

Primary Examiner

Art Unit 2851

dr

1/23/06